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A METHOD AND DEVICE FOR ESTIMATING THE PITCH OF A SPEECH
SIGNAL, USING A BINARY SIGNAL

CROSS REFERENCES TO RELATED APPLICATIONS

This application for patent claims the benefit of
priority from, and hereby incorporates by reference the entire
disclosure of, co-pending U.S. Provisional Application for
Patent Serial No. 60/197,044, filed April 14, 2000.

Field of the Invention

The invention relates to a method and device for estimating the
pitch of a speech signal, for example, in telephones.

Background of the Invention

In many speech processing systems it is desirable to know the
pitch period of the speech. As an example, several speech
enhancement algorithms are dependent on having a correct
estimate of the pitch period. One field of application where
speech processing algorithms are widely used is in mobile
telephones.

A well known way of estimating the pitch period is to use the
autocorrelation function, or a similar conformity function, on
the speech signal. An example of such a method is described in
the article D.A. Krubsack, R. J. Niederjohn, "An
Autocorrelation Pitch Detector and Voicing Decision with
Confidence Measures Developed for Noise-Corrupted Speech", IEEE